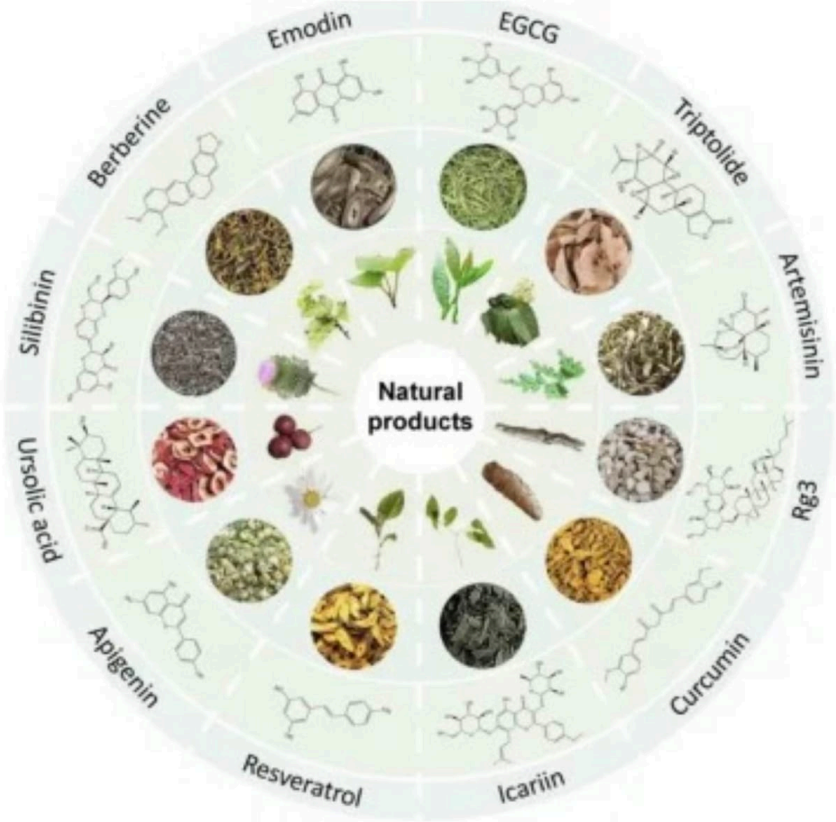
🎄 Merry Christmas To You All 🎄 Thank You For Being Truth Warriors 🎄

Over 1,100 Peer-Reviewed Studies Document The Anti-Cancer Potential of Safe, Non-Toxic Natural Compounds

TRUTH11.COM

Dec 21, 2025 4 min



GlobalResearch.ca

Nicolas Hulscher

Over 1,100 peer-reviewed studies now document the anti-cancer potential of safe, non-toxic natural compounds:

Cui *et al. Chinese Medicine* (2025) 20:82
https://doi.org/10.1186/s13020-025-01124-y

Chinese Medicine

REVIEW

Open Access

Natural anti-cancer products: insights from herbal medicine

Dianxin Cui[1†], Cheng Zhang[2†], Lili Zhang[1†], Jingbin Zheng[1], Jie Wang[1], Luying He[1], Haochun Jin[1], Qianming Kang[3], Yang Zhang[3], Na Li[3], Zhenlong Sun[3], Wenying Zheng[1], Jinchao Wei[1], Siyuan Zhang[1], Yibin Feng[2*], Wen Tan[3*] and Zhangfeng Zhong[1*]

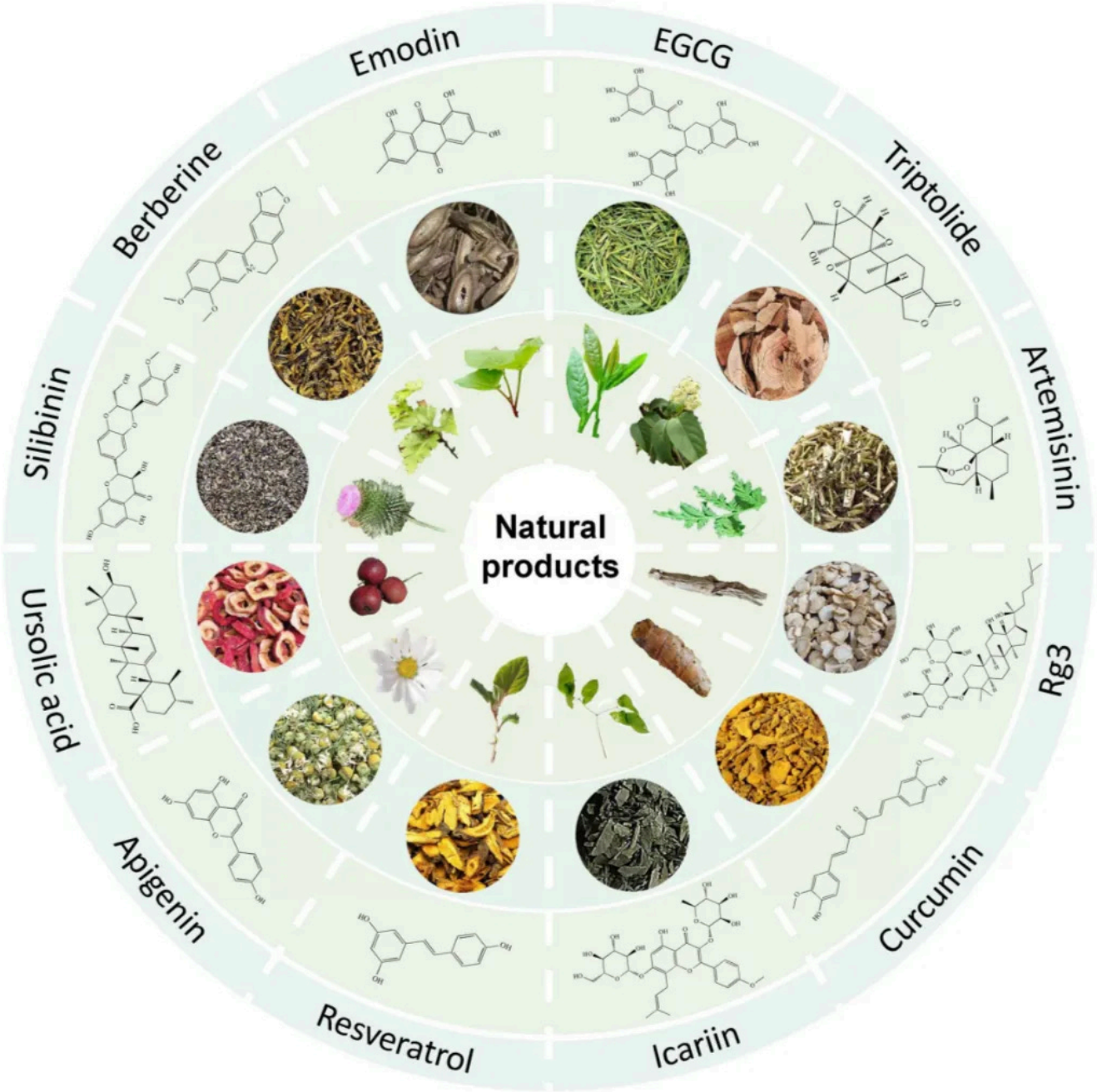
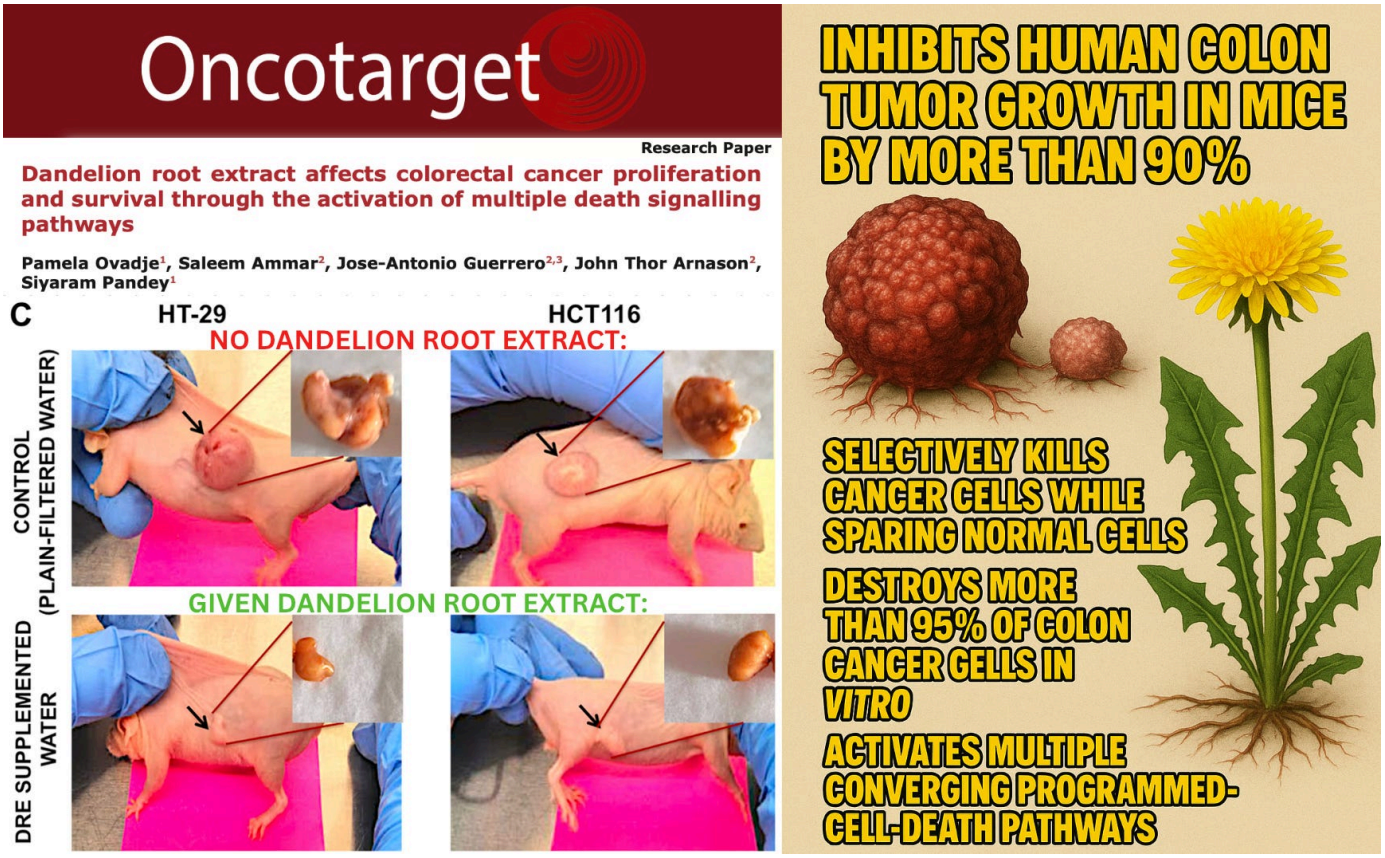


Fig. 1 Natural compounds derived from herbal medicine with anti-cancer effects. The natural products are displayed with their chemical structures, herbal slices, and plant sources, including Apigenin, Artemisinin, Berberine, Curcumin, Emodin, Epigallocatechin gallate (EGCG), Ginsenoside Rg3, Icariin, Resveratrol, Silibinin, Triptolide, and Ursolic acid (UA)

This enourmous body of evidence underscores the urgent need to rigorously investigate non-toxic therapies as viable anti-cancer agents.

A peer-reviewed study in *Oncotarget* has documented one of the most extraordinary findings in natural-compound cancer research: an aqueous extract of **dandelion root** — the common backyard plant — **reduced human colon tumor growth in mice by more than 90%, showed zero toxicity after 75 days of daily administration, and selectively killed cancer cells while sparing normal cells entirely.**

Dandelion root also **destroyed more than 95% of colon cancer cells in vitro and activated multiple programmed-cell-death pathways simultaneously.** No synthetic chemotherapy drug achieves all of these effects at once — which is why this study deserves far more attention than it received.



Tumor Growth Reduced by More Than 90%

In immunocompromised CD-1 mice implanted with two different human colon cancer lines (HT-29 and HCT116), oral dandelion root extract at 40 mg/kg/day dramatically suppressed tumor growth.

The treatment "**retarded the growth of human colon xenograft models by more than 90%**."

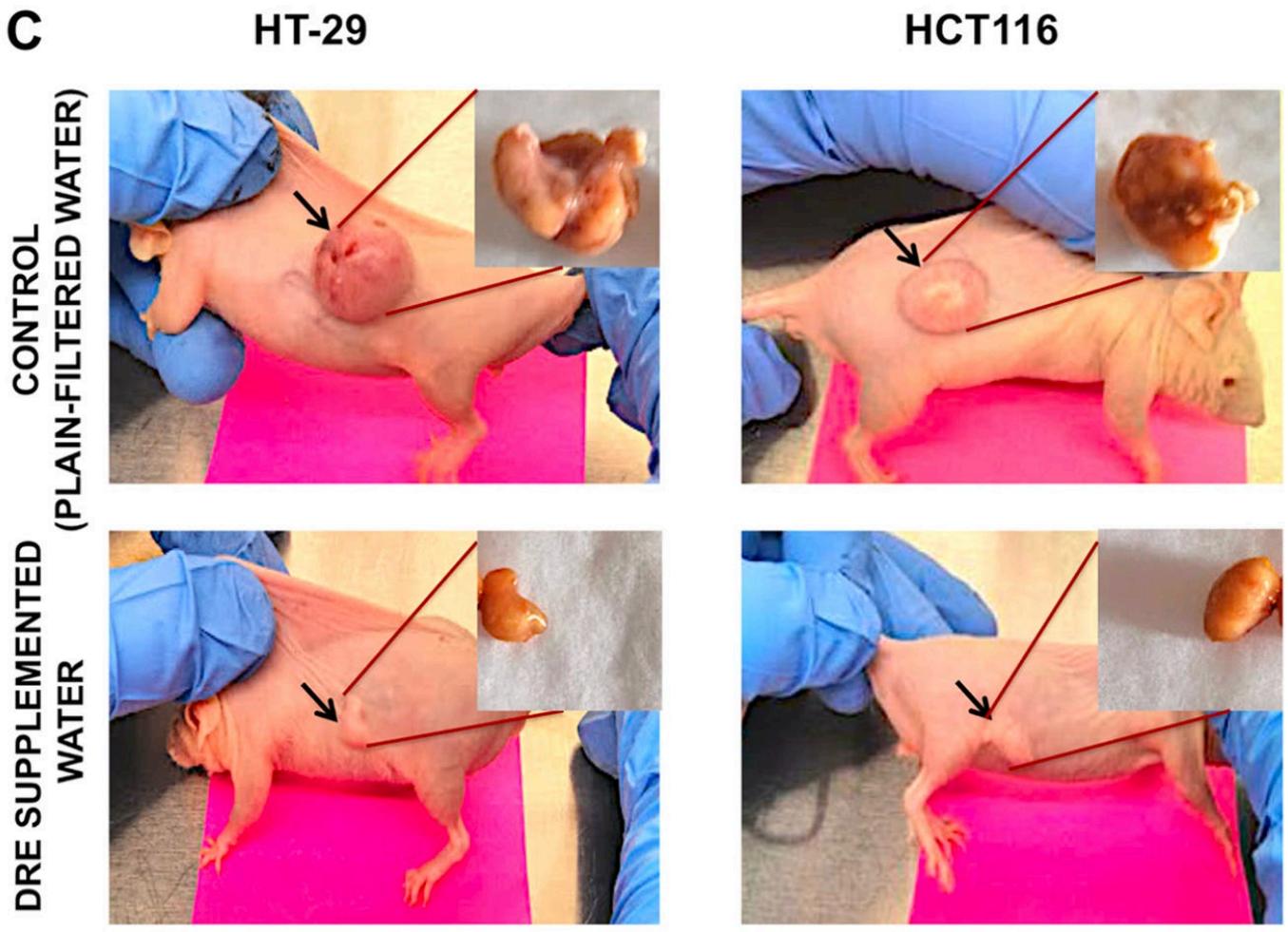


Figure 4 from the paper shows the difference visually: control mice developed massive tumors, while DRE-treated mice barely formed any tumor mass at all. Even late in the 75-day study, tumor volumes remained extremely small.

No Detectable Toxicity After 75 Days of Daily Treatment

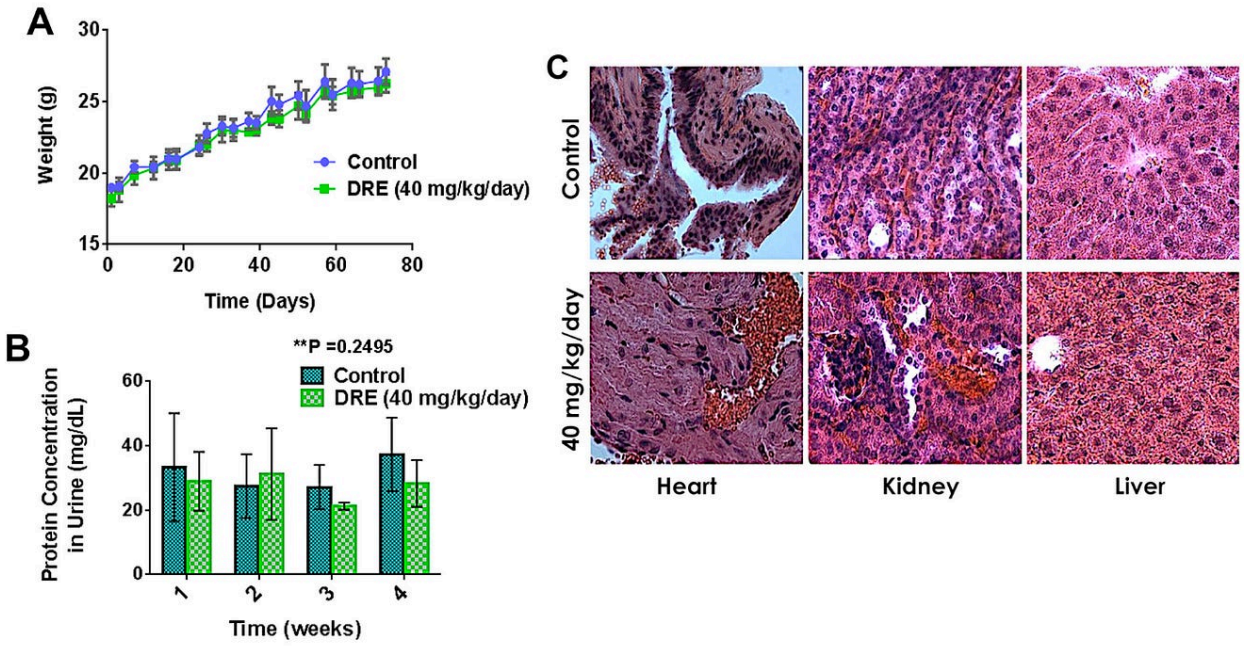


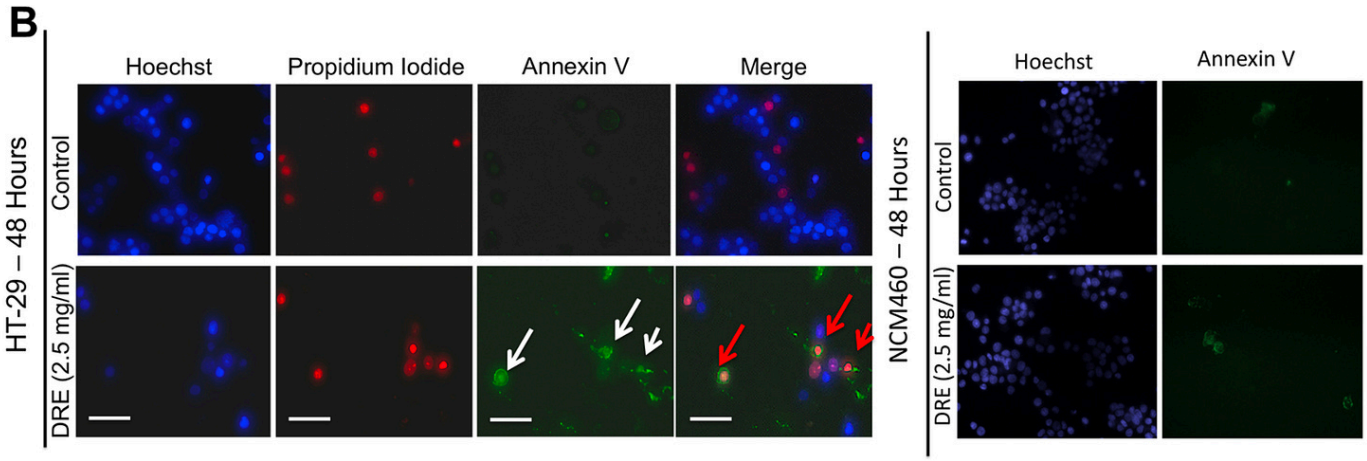
Figure 3: Dandelion root extract is well tolerated in animal models. Balb/C mice were separated into two groups, one group on oral administration of PBS – control and the other group on oral administration of DRE (40 mg/kg/day) for a period of 75 days. **A.** Weight of mice in each group for the duration of the study. **B.** Urine was obtained from mice every week for the last 4 weeks of the study. Protein urinalysis was carried out using urine dipstick and the Bradford protein assay. **C.** Hematoxylin and Eosin staining of tissues (hearts, kidneys and livers). Images were obtained on a brightfield microscope at 63X Objective.

Before testing tumor effects, researchers conducted a long-term toxicity assessment for 75 days at 40mg/kg/day:

- Weight curves of treated and untreated mice were identical.
- Urinalysis showed no rise in kidney protein markers.
- Histology of liver, kidneys, and heart showed no pathological changes.

In other words: **DRE produced no observable harm**, even with long-term systemic exposure — a sharp contrast to standard chemotherapy, which can cause multi-organ toxicity at far lower exposure durations.

95% of Cancer Cells Dead in 48 Hours — Normal Cells Untouched



One of the most remarkable findings is the extract's extreme selectivity: **dandelion root extract killed more than 95% of colon cancer cells in vitro while leaving normal cells unharmed**.

In vitro experiments showed:

- **HT-29 (p53-/-)** and **HCT116 (p53 WT)** colon cancer cells:
  → **Over 95% cell death within 48 hours**
- **NCM460 normal colon epithelial cells:**
  → **No loss of viability, no apoptosis, and no mitochondrial disruption**

Multi-Pathway Mechanism: Apoptosis, Mitochondria, ROS, and Gene Expression Shifts

The extract does not rely on a single mechanism of action — instead, it activates a *cascade* of cancer-cell vulnerabilities.

a. Mitochondrial membrane collapse

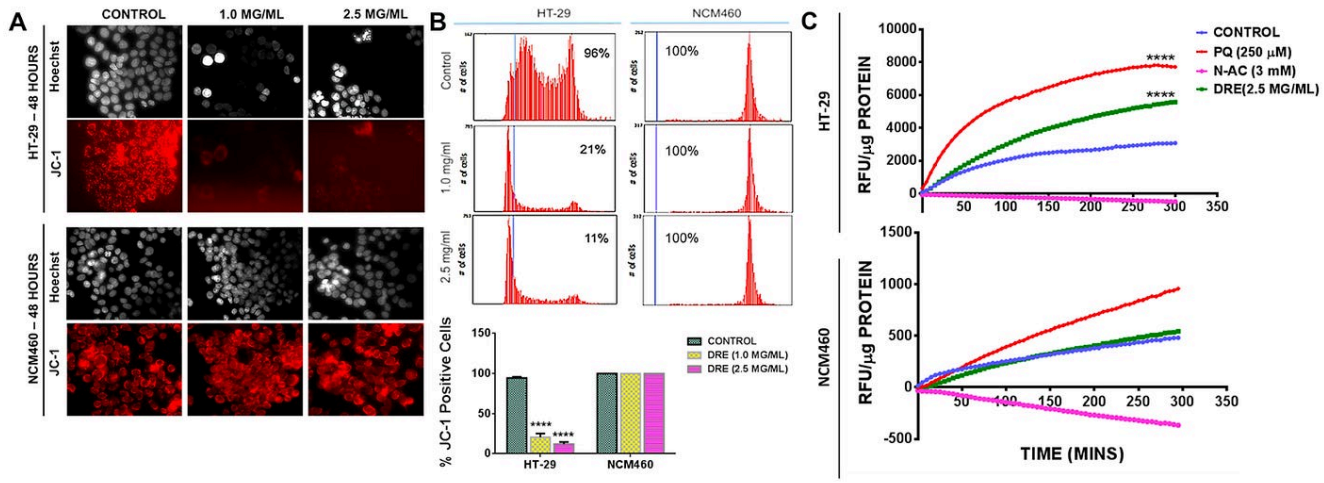


Figure 5: Dandelion root extract targets the mitochondria of colon cancer cells. JC-1 staining on HT-29 and NCM460. Red fluorescence intensity was measured by fluorescence microscopy (Magnification: 400X) **A.** and image based cytometry **B.** to detect the loss of the mitochondrial membrane potential. **C.** ROS production was measured in isolated mitochondria. Fluorescence readings were taken in 5-minute intervals for 5 hours at Ex. 560 nm and Em. 590 nm and expressed as relative fluorescence units (RFU) per µg protein. Statistics – Two way ANOVA ****P<0.0001.

Cancer cell mitochondria rapidly lost membrane potential after treatment, while normal mitochondria remained stable.

b. Massive surge in ROS (reactive oxygen species)

Isolated mitochondria from cancer cells produced a spike of ROS when exposed to DRE — but normal mitochondria did not.

Cancer cells often rely on fragile, dysregulated mitochondrial metabolism — this extract appears to exploit precisely that weakness.

c. Activation of caspase-8 & apoptosis pathways

Although caspase-8 was activated, blocking caspase-8 did *not* prevent cancer-cell death, meaning DRE activates multiple redundant death pathways.

d. Major gene-expression shifts toward programmed cell death

The extract upregulated pro-death genes in cancer cells (e.g., TNF, CASP1, SNCA) while downregulating pro-survival genes such as Bcl-2 and PARP2.

Normal cells showed the *opposite* gene-expression pattern — a clear signature of differential susceptibility.

Conclusions

This study demonstrates that aqueous dandelion root extract:

- **Inhibits human colon tumor growth in mice by more than 90%**
- **Exhibits no detectable toxicity during long-term administration**
- **Selectively kills cancer cells while sparing normal cells**
- **Destroys more than 95% of colon cancer cells in vitro**
- **Activates multiple converging programmed-cell-death pathways**
- **Targets mitochondrial vulnerabilities unique to cancer cells**

These findings were strong enough that Health Canada approved DRE for Phase I cancer trials in 2012, according to the authors. Unfortunately, the trial never advanced — patient recruitment stalled, no data were published, and no active listing appears in Health Canada's registry today.

As a result, the remarkable anti-cancer effects seen in vitro and in animal models have yet to be tested in humans. This is most likely because a common backyard plant is not very profitable for the Chemo Cartel.

With cancer rates continuing to climb, this non-toxic common plant deserves immediate clinical trials.

Original Article: https://www.globalresearch.ca/dandelion-root-extract-kills-cancer-cells-vitro-reduces-human-colon-tumor-growth/5908453

COMMENTS (0)

Start the conversation

Become a member of **Truth11.com** to start commenting.

Sign up now

Already a member? **Sign in**

Subscribe to Truth11.com

Receive Articles By Email • Support Independent Media

Subscribe now

Support Truth11.com | • Make A Donation

• Become A Monthly Subscriber

© Truth11.com 2025